

ABSTRACT OF THE DISCLOSURE

A transcutaneous immunization system delivers antigen to immune cells through the skin, and induces an immune response in an animal or human. For example, a skin-active adjuvant (e.g., an ADP-ribosylating exotoxin) can be used to induce an antigen-specific immune response (e.g., humoral and/or cellular effectors) after transcutaneous application of a dry formulation containing antigen and adjuvant to skin of the animal or human. The dry formulation may be a powder or a unit-dose patch. Use of adjuvant is not required if the antigen is sufficiently antigenic. Transcutaneous immunization may be induced with or without penetration enhancement.